

TITLE OF INVENTION

SLOPE MASTER

The Slope Master is used to detect the grade on all slopes in highway construction using a degree gauge. Example: 2 to 1 equals $26\frac{1}{2}$ degrees.

INVENTORS:

Ronald Dean Smith
Roanoke Rapids, N. C.
US Citizen

Patsy Anderson Smith
Roanoke Rapids, N. C.
US Citizen

This application claims the benefit of the filing date of Provisional Application Number 60/271,749, dated 2/27/2001.

SUMMARY AND OBJECTS OF THE INVENTION

The present invention relates to a highway grade instrument that grades slopes with minimum time involved.

The highway grade instrument of the present invention includes a degree scale.

A function component, glycerin acting as a stabilizer provides character to the invention.

Another feature, the magnetized base makes the invention versatile from machine to machine.

Other objects and advantages will become apparent and obvious from a study of the following description and the accompanying drawings which are merely illustrative of such invention.

BRIEF DESCRIPTION OF THE DRAWINGS

- FIG.1 FRONT VIEW OF THE HIGHWAY GRADE INSTRUMENT
 OF THE PRESENT INVENTION
- FIG.2 SIDE VIEW OF THE HIGHWAY GRADE INSTRUMENT
 OF THE PRESENT INVENTION
- FIG.3 BACK VIEW OF THE HIGHWAY GRADE INSTRUMENT
 OF THE PRESENT INVENTION

DETAILED DESCRIPTION OF THE INVENTION

With further reference to the drawings, the highway grade instrument of the present invention is shown therein. As will be appreciated from subsequent portions of this disclosure, the highway grade instrument is designed to grade slopes with minimum time.

Before describing the structure of the highway grade instrument in detail, it may be beneficial to review the basic component of the machine. In this regard, the highway grade instrument is a versatile gauge and accordingly includes a precision needle indicator in glycerin oil.

Now turning to a description of the highway grade instrument it is seen that the same includes:

A formula is used to detect the grade on all slopes in highway construction using a degree gauge. (Example: 2 to 1 slope = $26\frac{1}{2}$ degrees).

The face is clear plastic and measures $4\frac{1}{2}$ inches in diameter. The round inner face is composed of a white light gauge metal with a $1\frac{1}{2}$ inch red end arrow indicator. This inner face bottom center indicates 0 degrees. From right to left the inner face is marked every 5/100 and from left to right the inner face is marked every 5/100. The gauge is numbered from 0 to 90 both ways.

Glycerin oil fluid $\frac{3}{4}$ fills the compartment between the outer face and the inner face. This acts a stabilizer for the needle indicator gauge.

The entire face is encased in industrial plastic with a depth of $2\frac{1}{2}$ inches.

The 6 inch lever pointer has a wing nut attaching to the back center of the black case ending with a 1 and $\frac{3}{4}$ inch red tip that points to the grade setting desired.

The entire face sits on a metal stem with a diameter of $\frac{1}{2}$ inch. This stem is positioned into a solid heavy plastic mounting measuring $4\frac{1}{2}$ inches by $4\frac{1}{2}$ inches with a height of 1 inch.

The mounting sits on a base magnet measuring 5 inches by 5 inches and is $\frac{5}{8}$ inch high. Attached to the magnet bottom is a $\frac{1}{16}$ inch rubber mat measuring 5 inches by 5 inches.

WHAT IS CLAIMED

- 1) The highway grade instrument of claim wherein measures grade slopes accurately in minimum time.
- 2) The highway grade instrument of claim wherein has a precision needle indicator in glycerin as a stabilizer agent.
- 3) The highway grade instrument of claim wherein uses degree measurement.
- 4) The highway grade instrument of claim wherein is versatile and can be moved to any desired place within heavy equipment. The easy use allows for measuring grade while going up, down, or sideways.